C/015/032 Incoming

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April 3, 2009

Utah Division of Water Quality 288 North 1460 West PO Box 144870 Salt Lake City, UT 84114-4780

Attn: Jeff Studenka

Environmental Scientist

Re:

Crandall Canyon Mine

UPDES Permit No. UT0024368

DWO Violation & Order, Docket No. 109-01

Dear Mr Studenka:

This letter is written in response to the above-referenced violation and order issued to the Crandall Canyon Mine for excedence of the iron limits in the mine discharge water. As you are aware, the Crandall Canyon Mine has been sealed up due to the disaster of August 6, 2007. Therefore it is impossible at this time to conduct any underground activities to remedy the high-iron situation. Therefore, we are now proposing to construct a treatment facility on the surface which we hope will take care of the problem.

The mine discharge water is collected from behind the portal seals into a 12" diameter pipe which conveys the water down the hillside and discharges it at an approved UPDES outfall. Directly below the portals is a relatively large (0.31 arce) area of the mineyard that we propose to utilize as an aeration treatment site for the water. In brief, the mine water would be diverted to the upper end of this area where it would then be allowed to flow across the site before being collected and routed back again to the original outfall point. This treatment area would be physically isolated from the surrounding mineyard so that no co-mingling of surface storm drainage water and discharge treatment water would occur. The treatment area would be equipped with a series of rows of low-lying precast concrete curbs which would slow the water velocity, and also spread the flow out over the entire treatment pad in order to maximize the contact with air. The area will also be lined with a layer of crushed limestone or other rock to help capture the precipitated iron particles. The facility would be designed to allow sufficient access so that the rock could be cleaned out and replaced on an as-needed basis.

There is electrical power available at the upper end of the proposed site. This opens the option in the future for adding spray pumps to the circuitry (to increase the aeration potential) and/or to

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install a chemical injection system for flocculants or coagulants to aid in the precipitation process. This allows the ability to phase in more aggressive treatment techniques as conditions warrant.

As we watched the Discharge Monitoring Reports that showed the recent but dramatic rise in the iron content of the mine water, we assumed (correctly) that we would soon be out of compliance. Therefore, several months ago we began discussions with DOGM, Forest Service, and DWQ regarding pending plans for such a treatment facility. This planning process included several onsite meetings with representatives from the various agencies. As a result of these discussions we have recently submitted an amendment the Crandall Canyon Mining and Reclamation Plan to DOGM for the construction of this facility. I have enclosed the pertinent sections of this plan amendment (highlighted in red) with this letter. There are several drawings of the proposal included as well. The narrative and drawings give a more detailed description of the proposal, and are included herein as part of our official response to DWQ for this violation.

For the past three weeks we have had a heavy-equipment contractor begin preparing the site for construction. This has involved cleaning up all the loose coal material from the pad and from off the ledge rock above. We have also dug up the existing buried discharge pipeline to determine the best location to tie in the new line. We have also surveyed the site and now have a very tight plan for construction. We have scheduled to meet soon with Nalco Chemical to sample the water and conduct bench testing to determine which chemical treatment has the greatest potential for success as part of an overall treatment plan.

DOGM is aware of the water quality order and has assured us they will give the permit amendment a timely review. If you have any questions or comments concerning this response please call me at (435) 888-4017.

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David Shaver Resident Agent

cc: Daron Haddock, DOGM Dale Harbor, USFS